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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,716

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Makoto Saito

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09/03/2008

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EXAMINER

O BRIEN, JEFFREY D

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,716	<b>Applicant(s)</b> SAITO ET AL.	
	<b>Examiner</b> Jeffrey O'Brien	<b>Art Unit</b> 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 6, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of the Species of Figures 1-8 in the reply filed on 6/16/2008 is acknowledged. Applicant did not indicate which claims encompass the elected species. Examiner has reviewed the claims and has determined that claims 1-5, 7-11 are directed towards the elected species. As a result, claims 6 and 12-13 will be treated as withdrawn as they include the limitation of "a relief part" which is not disclosed in the description of the embodiment of Figures 1-8.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 2/1/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: "the stationary-side member" lacks antecedent basis. For purposes of examination, this has been taken to mean "a stationary-side member".

4. Claim 3 is objected to because of the following informalities: "hinge brackets" lacks antecedent basis. It is recommended that the claim be reworded to properly claim hinge brackets. Examiner suggests "a first hinge bracket connected with the stationary-side member and a second bracket connected with the rotation-side member". Applicant

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is reminded to apply any changes of terminology to all subsequent dependent claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The language used in claims 5 and 11 is unclear. "Engaged with either a hinge bracket of the corresponding stationary-side member or the corresponding rotation-side member" is unclear as to whether Applicant intends for the torsion bar to be fixed to the hinge bracket of the rotation-side member or directly to the rotation side member. For purposes of examination, this has been taken to mean "Engaged with either a hinge bracket of the corresponding stationary-side member or a hinge bracket of the corresponding rotation-side member".

8. Further, regarding claims 5 and 11, the phrase "as the case may be" should be removed.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Carpenter et al. (US 5,771,540) herein referred to as '540.

11. For Claim 1, '540 discloses a hinge device comprising: a friction-force generating mechanism (Fig. 2: 21, 23, 31) that has a shaft (31) supporting--rotatably in both the forward and reverse directions--a rotation-side member (Fig. 1: 5) on a stationary-side member (3), and that uses friction force to hold the angle of the rotated rotation-side member, and a torsion bar (25) that penetrates through said shaft (31) in the axial direction, with one end (27) of said torsion bar (25) directly or indirectly fixed to said stationary-side member (3), and the other end (37) of said torsion bar directly or indirectly fixed to the rotation-side member (5), and that--by being twisted by the rotation of the rotation-side member in either the forward or reverse direction--stores torque that energizes the rotation-side member in the direction opposite to said rotation of the rotation-side member.

12. For Claim 2, '540 discloses a hinge device as set forth in claim 1, wherein said torsion bar is arranged in such a way that the torque is approximately zero when the rotation-side member is approximately perpendicular to the stationary-side member, and that said torque increases as the angle of the rotation-side member changes, from its approximately perpendicular position, due to the rotation of the rotation-side member in the forward or reverse direction (Column 3, Lines 20-24, 34-37).

13. For Claims 3 and 8, '540 discloses a hinge device as set forth in claims 1 and 2, wherein hinge brackets (21,23)--which are connected with the stationary-side member

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and the rotation-side member, respectively--are attached to said shaft (31), and said torsion bar penetrates through these hinge brackets.

14. For Claims 4, 9 and 10, '540 discloses a hinge device as set forth in claims 1-3, wherein at least one end (27) of said torsion bar is exposed outside the shaft (31), and the exposed end (27) is directly fixed to the stationary-side member (3).

15. For Claim 5 and 11, '540 discloses a hinge device as set forth in claims 3 and 4, wherein one end (31) of said torsion bar (25) is fixed to and engaged with the hinge bracket (23) of the corresponding rotation-side member (5).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter et al. (US 5,771,540) herein referred to as '540 as applied to claim 1 above, and further in view of Kaneko et al. (US 6,421,878) herein referred to as '878.

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19. For Claim 7, '540 discloses a hinge device as set forth in claim 1, except wherein said friction-force generating mechanism is equipped with a spring washer that is formed so as to have a U-shaped cross-section, and directly or indirectly overlaps and comes into contact with said shaft under a condition that the spring washer is bent.

20. '878 teaches a hinge having a friction-force generating mechanism equipped with a spring washer (Fig. 1: 7a) that is formed so as to have a U-shaped cross-section, and directly or indirectly overlaps and comes into contact with a shaft (2) under a condition that the spring washer is bent. It would have been obvious to one of ordinary skill in the art to apply the spring washer of '878 to the hinge of '540 in order to allow for precise tuning of the frictional forces applied to the hinge to control the range of angles at which the hinged device is useable.

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hosoi (US 5,500,982), Ojima (US 5,382,108), Ojima (US 5,253,391), Hosoi (US 5,052,078), Lu et al. (US 6,779,234), Sherman (US 5,165,145), Alexander (US 4,355,914), Duffy (US 6,648,398), and Duffy (US 6,619,723) all teach relevant structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey O'Brien whose telephone number is (571)270-3655. The examiner can normally be reached on Monday through Friday 8:00am-5:30pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/  
Supervisory Patent Examiner, Art Unit 3677

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